## Case 3149

Proposed conservation of 31 species-group names originally published as junior primary homonyms in *Buprestis* Linnaeus, 1758 (Insecta, Coleoptera)

## C.L. Bellamy

Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, California 90007, U.S.A. (e-mail: cbellamy@nhm.org)

**Abstract.** The purpose of this application is the conservation of 31 specific names which have been in use for buprestid beetles for very many years but which, when originally published in combination with *Buprestis*, were junior primary homonyms. The species are now placed in many different genera. In none of these cases have the species denoted by the homonyms been considered congeneric since the 19th-century, if at all, and this case is submitted in accord with Article 23.9.5 of the *Code*.

**Keywords.** Nomenclature; taxonomy; Coleoptera; BUPRESTIDAE; Buprestis; buprestids; jewel beetles.

- 1. According to Article 23.9.5 of the Code, when two or more primary homonyms are in use 'but the names apply to taxa not considered congeneric after 1899, an author must not automatically replace the junior homonym; the case should be referred to the Commission and meanwhile prevailing usage of both names is to be maintained'. Therefore, I refer a number of primary homonymy situations from the very well-known genus *Buprestis* Linnaeus, 1758 (type genus of the jewel beetle family BUPRESTIDAE Leach, 1815), and propose the conservation of the existing usage of 31 specific names which have not appeared in homonymous combinations since the 19th-century and in some cases have never been considered congeneric with their senior homonyms. In the 18th century, and in the early part of the 19th, Buprestis was a 'catch-all' genus (by 1800 more than 250 species had been described in combination with that generic name), but for more than a hundred years taxa first published in Buprestis have been divided amongst many genera and the original primary homonymies have been overlooked or ignored. In some cases the senior homonyms have not been in use because they have older synonyms. To now abandon the longstanding usage of numerous specific names would be taxonomically extremely confusing, and it is fortunate that the new Code dictates that this must no longer be done unless the Commission so rules.
- 2. The cases of primary homonymy of specific names originally published in combination with *Buprestis* are given below in alphabetical order. The junior name(s) is/are given first.
- (1) *B. arcuata* Laporte & Gory, 1837 (p. 159). Preoccupied by *B. arcuata* Say, 1825 (p. 251). *B. arcuata* Laporte & Gory was transferred to *Cinyra* Laporte & Gory, 1837 by Gemminger & Harold (1869, p. 1381) and later into *Spectralia* Casey, 1909; it is now known as *S. arcuata*. *B. arcuata* Say was placed in *Agrilus* Curtis, 1825 by Say (1839, p. 162) and is now known as *A. arcuatus*.

- (2) *B. aurata* Fabricius, 1787 (p. 178). Preoccupied by *B. aurata* Pallas, 1776 (p. 719). *B. aurata* Pallas was transferred to *Erythyrea* Serville in Dejean, 1833 by Marseul (1865, p. 190) and is now known as *E. aurata*. The Fabricius taxon was transferred into *Chrysochroa* Laporte & Carcel, 1833 by Laporte & Gory (1835, p. 16), and later into *Chrysaspina* Théry, 1926 (a replacement name for the junior homonym *Chrysaspis* Saunders, 1869); it is now known as *Chrysaspina aurata*. Another species was called *B. aurata* by Thunberg (1787, p. 52), but since Saunders (1871, p. 50) it has been treated as a synonym of *Aristosoma suturale* (Thunberg, 1789) and I do not propose the conservation of its name.
- (3) *B. bella* Gory, 1840 (p. 116). Preoccupied by *B. bella* Guérin-Méneville, 1830 (p. 66). *B. bella* Guérin-Méneville was moved into *Anthaxia* Eschscholtz, 1829 by Mannerheim (1837, p. 86) and is currently treated as a junior synonym of *Curis maulica* (Molina, 1782). *B. bella* Gory was transferred to *Poecilonota* Eschscholtz, 1829 by Lacordaire (1857, p. 37) and is now placed in *Scintillatrix* Obenburger, 1956.
- (4) *B. bilineata* Latreille, 1813 (p. 60). Preoccupied by *B. bilineata* Weber, 1801 (p. 74). *B. bilineata* Latreille was transferred to *Psiloptera* Solier, 1833 by Dejean (1833, p. 76) and is currently placed in *Pseudolampetis* Obenberger, 1926. *B. bilineata* Weber was placed in *Agrilus* Curtis, 1825 by Say (1839, p. 162) and is now known as *A. bilineatus*.
- (5) B. cayennensis Herbst, 1801 (p. 56). Preoccupied by B. cayennensis Gmelin, 1790 (p. 1931). The name B. cayennensis has been used for three different species. B. cayennensis Gmelin was placed in Actenodes Dejean, 1833 by Gemminger & Harold (1869, p. 1421) and is known as A. cayennensis. B. cayennensis Herbst was first transferred to Chrysobothris Eschscholtz, 1829 by Dejean (1833, p. 79) and later to Colobogaster Solier, 1833; it is now known as Colobogaster cayennensis. B. cayennensis Buquet in Gory, 1840 was transferred to Melanophila Eschscholtz, 1829 by Lacordaire (1857, p. 48); it is currently treated as a junior synonym of Eudiana guianensis (Chevrolat, 1838) and I do not propose its conservation.
- (6) *B. coerulea* Olivier, 1790 (p. 21). Preoccupied by *B. coerulea* Thunberg, 1789 (p. 91). The name *B. coerulea* has been used for three different species. *B. coerulea* Olivier was transferred to *Psiloptera* Solier, 1833 by Redtenbacher (1843, p. 505) and later to *Lampetis* Dejean, 1833; it is now known as *L. coerulea*. *B. coerulea* Thunberg, 1789 was transferred to *Meliboeus* Deyrolle, 1864 by Saunders (1871, p. 106) and is now known as *M. coeruleus*. *B. coerulea* Rossi, 1790 (p. 407) has been treated as a synonym of *Agrilus cyanescens* Ratzeburg, 1837 since Saunders (1871, p. 106) and I do not propose its conservation.
- (7) B. cuprifera Laporte & Gory, 1836 (p. 59). Preoccupied by B. cuprifera Kirby, 1818 (p. 457). B. cuprifera Laporte & Gory has been placed in Polybothris Spinola, 1837 since Kerremans (1892). The Kirby taxon was transferred to Plagiope Saunders, 1868 by Saunders (1869, p. 13); it is now placed in Torresita Gemminger & Harold, 1869, a replacement name for the preoccupied Plagiope. A subsequent use of B. cuprifera by Laporte & Gory (1837, p. 119) is currently treated as a synonym of Melobasis propinqua (Laporte & Gory, 1837, p. 120) and I do not propose its conservation.
- (8) B. cyanea Rossi, 1790 (p. 20). Preoccupied by B. cyanea Fabricius, 1775 (p. 223). The name B. cyanea has been used for three different species. B. cyanea

Rossi has been placed in *Agrilus* Curtis, 1825 since that genus was established. *B. cyanea* Fabricius is the type species of *Phaenops* Dejean, 1833. *B. cyanea* Olivier, 1790 (p. 91) has been treated as a junior synonym of *Agrilus viridis* (Linnaeus, 1758) since Dejean (1833, p. 83) and I do not propose its conservation.

- (9) B. cyanipes Say, 1823 (p. 164). Preoccupied by B. cyanipes Fabricius, 1787 (p. 178). B. cyanipes Say has been placed in Poecilonota Eschscholtz, 1829 since LeConte (1860, p. 254) and is a well-known North American species. B. cyanipes Fabricius is a Jamaican species placed in Polycesta Serville in Dejean, 1833 since Kerremans (1892, p. 161).
- (10) *B. depressa* Fabricius, 1775 (p. 219). Preoccupied by *B. depressa* Linnaeus, 1771 (p. 533). The name *B. depressa* has been used four times, with two of the junior homonyms replaced earlier. *B. depressa* Fabricius has been placed in *Pelecopselaphus* Solier, 1833 since Solier (1833, p. 287). *B. depressa* Linnaeus, 1771 has been in *Polycesta* Serville in Dejean, 1833 since Lacordaire (1857, p. 63). Since Laporte & Gory (1838, p. 3) *B. depressa* Fabricius, 1775 has been known by the replacement name *Strigopteroides aegyptiaca* (Gmelin, 1790, p. 1932). *B. depressa* Olivier, 1790 (p. 39) is known by the replacement name *Polycesta olivieri* Waterhouse, 1904 (p. 255).
- (11) *B. drummondi* Kirby, 1837 (p. 157). Preoccupied by *B. drummondi* Laporte & Gory, 1836 (p. 37). *B. drummondi* Kirby was transferred to *Melanophila* Eschscholtz, 1829 by Gemminger & Harold (1869, p. 1385); it is currently known as *Phaenops drummondi*. *B. drummondi* Laporte & Gory was transferred to *Psiloptera* Solier, 1833 by Gemminger & Harold (1869, p. 1366) and is currently placed in *Lampetis* Dejean, 1833.
- (12) B. excellens Klug, 1855 (p. 644). Preoccupied by B. excellens Klug, 1825 (p. 421). B. excellens Klug, 1855 has been placed in Acmaeodera Eschscholtz, 1829 since Lacordaire (1857, p. 68), while the species named in 1825 has been placed in Conognatha Eschscholtz, 1829 since Dejean (1833, p. 76).
- (13) *B. fasciata* Villers, 1789 (p. 339). Preoccupied by *B. fasciata* Fabricius, 1787 (p. 177). The name *B. fasciata* has been used for three species. *B. fasciata* Villers has been placed in *Coraebus* Gory & Laporte, 1839 since Saunders (1871, p. 104). *B. fasciata* Fabricius was placed in *Ancylochira* Eschscholtz, 1829 by Dejean (1833, p. 78) and is now known as *Cypriacus fasciatus*. *B. fasciata* Voet, 1806 (p. 96) has been treated as a junior synonym of *Dismorpha linearis* (Linnaeus, 1758) since Saunders (1871, p. 112) and I do not propose its conservation.
- (14) *B. femorata* Olivier, 1790 (p. 47). Preoccupied by *B. femorata* Villers, 1789 (p. 338). *B. femorata* Olivier has been placed in *Chrysobothris* Eschscholtz, 1829 since Dejean (1833, p. 80) and is a widespread and economically important species in North America. The Villers taxon has long been synonymized under *Anthaxia hungarica* (Scopoli, 1772).
- (15) *B. flavofasciata* Herbst, 1801 (p. 306). Preoccupied by *B. flavofasciata* Piller & Mitterpacher, 1783 (p. 84). Herbst's taxon has been treated as a subspecies of *Acmaeodera trifasciata* (Thunberg, 1789, p. 95) since Gemminger & Harold (1869, p. 1412). *B. flavofasciata* Piller & Mittenpacher is the type species of *Acmaeodorella* (*Carininota*) Volkovitsh, 1979.
- (16) B. foveicollis Gory, 1840 (p. 95). Preoccupied by B. foveicollis d'Urville in Boisduval, 1835 (p. 73). The southern African B. foveicollis Gory was transferred to

Damarsila Thomson, 1878 by Thomson (1878, p. 33) and is now placed in Lampetis Dejean, 1833. B. foveicollis d'Urville was designated by Deyrolle (1864, p. 46) as the type species of his genus Cyphogastra and is still placed in that genus.

(17) B. geminatus Say, 1823 (p. 163). Preoccupied by B. geminatus Illiger, 1803 (p. 244). Say (1839, p. 162) transferred his B. geminatus of 1823 to Agrilus Curtis, 1825; it is still placed in that genus and is a widespread eastern North American species. Since Dejean (1833, p. 81) B. geminatus Illiger has been treated as a junior synonym of Sphenoptera rauca (Fabricius, 1787, p. 177).

(18) B. gibbicollis Say, 1823 (p. 161). Preoccupied by B. gibbicollis Illiger, 1803 (p. 239). B. gibbicollis Say was transferred to Ptosima Serville in Dejean, 1833 by LeConte (1860, p. 221) and is widespread and well-known in eastern North America. Illiger's taxon from Iberia was transferred to Coraebus Gory & Laporte, 1839 by Gistel (1856, p. 135) and is now placed in Meliboeus Deyrolle, 1864.

(19) *B. haemorrhoidalis* Olivier, 1790 (p. 38). Preoccupied by *B. haemorrhoidalis* Herbst, 1780 (p. 97). Olivier's species was transferred to *Stigmodera* Eschscholtz, 1829 by Laporte & Gory (1838, p. 55) and is currently placed in the Neotropical genus *Conognatha* Eschscholtz, 1829. *B. haemorrhoidalis* Herbst is a widespread Palaearctic species still classified in *Buprestis*.

(20) *B. interrupta* Laporte & Gory, 1837 (p. 81). Preoccupied by *B. interrupta* Olivier, 1790 (p. 26). Gemminger & Harold (1869, p. 1368) transferred *B. interrupta* Laporte & Gory to *Psiloptera* Solier, 1833; it is now regarded as a subspecies of *Lampetis rugosa* (Palisot de Beauvois, 1807, p. 44). Olivier's taxon has been known as *Sternocera interrupta* since Dejean (1883, p. 74).

(21) *B. maculipennis* Gory, 1841 (p. 118). Preoccupied by *B. maculipennis* Laporte & Gory, 1837 (p. 111). Gory's taxon of 1841 remains in *Buprestis*, while the earlier homonym has been used as *Halecia maculipennis* (Laporte & Gory, 1837) since Gemminger & Harold (1869, p. 1361).

(22) *B. mucronata* Laporte & Gory, 1836 (p. 62). Preoccupied by *B. mucronata* Klug, 1825 (p. 426). Gemminger & Harold (1869, p. 1364) placed *B. mucronata* Laporte & Gory in *Polybothris* Dejean, 1833 and on p. 1442 transferred Klug's species to *Agrilus* Curtis, 1825; these placements have been maintained ever since.

(23) *B. nobilis* Fabricius, 1787 (p. 180). Preoccupied by *B. nobilis* Linnaeus, 1758 (p. 410). *B. nobilis* Fabricius has been placed in *Chrysobothris* Eschscholtz, 1829 since Saunders (1871, p. 95), while Dejean (1833, p. 80) designated *B. nobilis* Linnaeus as the type species of his new genus *Actenodes*, in which it remains today.

(24) *B. picta* Thunberg, 1827 (p. 47) and *B. picta* Waterhouse, 1882 (p. 15). Both preoccupied by *B. picta* Pallas, 1773 (p. 719). The name *B. picta* has been used for three species. The oldest homonym was transferred to *Melanophila* Eschscholtz, 1829 by Gemminger & Harold (1869, p. 1385) and later to *Trachypteris* Kirby, 1837, of which it is the type species; it is currently known as *T. picta* (Pallas, 1773). *B. picta* Thunberg was transferred to *Julodis* Solier, 1833 by Saunders (1871, p. 3) and since Kerremans (1902, p. 13) has been known as *Neojudolis picta* (Thunberg, 1827). *B. picta* Waterhouse, 1882 is still placed in *Buprestis*.

(25) B. pumila Klug, 1829 (p. 37). Preoccupied by B. pumila Illiger, 1803 (p. 275). B. pumila Klug has been placed in Anthaxia Eschscholtz, 1829 at least since Gemminger & Harold (1869, p. 1390), while B. pumila Illiger has been in Trachys

Fabricius, 1801 at least since Lacordaire (1857, p. 88).

- (26) *B. salicis* Lewis, 1893 (p. 337). Preoccupied by *B. salicis* Fabricius, 1776 (p. 237). The placement by Lewis of his taxon in *Buprestis* is inexplicable; it was transferred to *Trachys* Fabricius, 1801 by Kerremans (1903, p. 310) and is now treated as a subspecies of *T. minutus* (Linnaeus, 1758). *B. salicis* Fabricius has been placed in *Anthaxia* Eschscholtz, 1829 since Dejean (1833, p. 80).
- (27) *B. sulcata* Fischer von Waldheim, 1824 (p. 197). Preoccupied by *B. sulcata* Thunberg, 1789 (p. 90). The Fischer von Waldheim taxon has been placed in *Sphenoptera* Dejean, 1833 since Gemminger & Harold (1869, p. 1416). *B. sulcata* Thunberg, 1789 was transferred to their new genus *Chrysodema* by Laporte & Gory (1835, p. 18) and is currently placed in *Iridotaenia* Deyrolle, 1864. A subsequent use of the name *B. sulcata* by Thunberg (1827, p. 44) has been treated as a junior synonym of *Pelecopselaphus depressus* (Fabricius, 1775, p. 219) since Saunders (1871, p. 19).
- (28) *B. variolosa* Fabricius, 1801 (p. 109. Preoccupied by *B. variolosa* Paykull, 1799 (p. 219). The Fabricius taxon was transferred to *Psiloptera* Solier, 1833 by Gemminger & Harold (1869, p. 1369) and is currently placed in *Lampetis* Dejean, 1833. *B. variolosa* Paykull was transferred to his new genus *Lampra* by Dejean (1833, p. 78); it was designated as the type species of *Poecilonota* Eschscholtz, 1829 in Opinion 1825 (1996). Another species called *B. variolosa* by Laporte & Gory (1836, p. 30) is now known by the replacement name *Lampetis coeruleitarsis* (Saunders, 1871, p. 23).
- (29) B. ventralis Waterhouse, 1882 (p. 14). Preoccupied by B. ventralis Laporte & Gory, 1837 (p. 158). B. ventralis Waterhouse remains in Buprestis, while the Laporte & Gory taxon was transferred to Cinyra Laporte & Gory, 1837 by Lacordaire (1857, p. 46) and to Halecia Laporte & Gory, 1837, in which it is now placed, by Saunders (1871, p. 20)
- (30) *B. vetusta* Boisduval, 1835 (p. 85). Preoccupied by *B. vetusta* Ménétries, 1832 (p. 152). The Boisduval taxon is the type species by monotypy of *Nascio* Laporte & Gory, 1837. *B. vetusta* Ménétries was transferred to *Acmaeodera* Eschscholtz, 1829 by Gemminger & Harold (1869, p. 1414) and is currently known as *Acmaeoderella vetusta*.
- 3. As stated at the outset, the junior primary homonyms listed above have been in use for considerably more than 100 years and to displace them now would upset the established nomenclature in numerous genera without serving any purpose. In some cases there are available synonyms which could be introduced as substitute names, but in others entirely new names would have to be formulated; in neither situation would the changes offer anything but loss of information and confusion. This application for the conservation of prevailing usage is submitted in the interests of stability and in accord with Article 23.9.5 of the *Code*.
- 4. The International Commission on Zoological Nomenclature is accordingly asked to use its plenary power to rule that the following specific names are not to be treated as invalid by reason of having been originally published as junior primary homonyms in combination with *Buprestis* Linnaeus, 1758, and to place these names on the Official List of Specific Names in Zoology:
  - (1) arcuata Laporte & Gory, 1837;
  - (2) aurata Fabricius, 1787;
  - (3) bella Gory, 1840;
  - (4) bilineata Latreille, 1813;

- (5) cayennensis Herbst, 1801;
- (6) coerulea Olivier, 1790;
- (7) cuprifera Laporte & Gory, 1836;
- (8) cyanea Rossi, 1790;
- (9) cyanipes Say, 1823;
- (10) depressa Fabricius, 1775;
- (11) drummondi Kirby, 1837;
- (12) excellens Klug, 1855;
- (13) fasciata Villers, 1789;
- (14) femorata Olivier, 1790;
- (15) flavofasciata Herbst, 1801;
- (16) foveicollis Gory, 1840;
- (17) geminatus Say, 1823;
- (18) gibbicollis Say, 1823;
- (19) haemorrhoidalis Olivier, 1790;
- (20) interrupta Laporte & Gory, 1837;
- (21) maculipennis Gory, 1841;
- (22) mucronata Laporte & Gory, 1836;
- (23) nobilis Fabricius, 1787;
- (24) (a) *picta* Thunberg, 1827; (b) *picta* Waterhouse, 1882;
- (25) pumila Klug, 1829;
- (26) *salicis* Lewis, 1893;
- (27) sulcata Fischer von Waldheim, 1824;
- (28) variolosa Fabricius, 1801;
- (29) ventralis Waterhouse, 1882;
- (30) vetusta Boisduval, 1835.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, London, SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).